

## PATENT ABSTRACTS OF JAPAN

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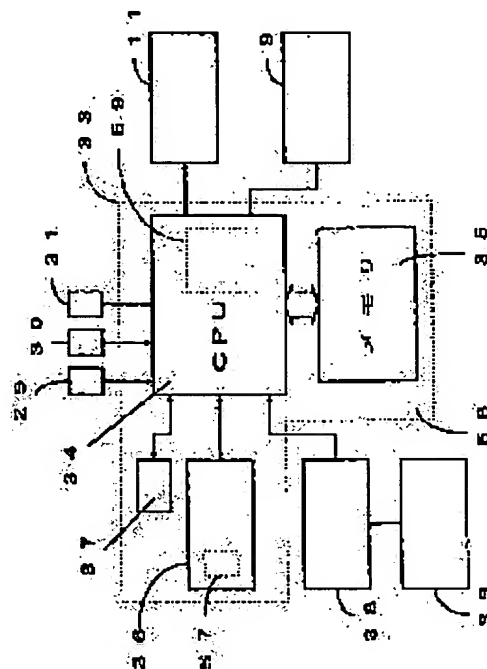
(72)Inventor : KONDO SHUJI  
GOTO KOJI

## (54) MESSAGE MACHINE

## (57)Abstract:

**PROBLEM TO BE SOLVED:** To easily reproduce the last-time massage motion by successively and automatically storing the operation contents of an operating part and operation time and reproducing the massage motion in accordance with the operation contents and the operation time.

**SOLUTION:** When a power source switch is turned on and a remote control operation device 39 is operated, the operation contents, the operation time and the movement position of a massage driving part 11 are temporarily stored in the register of CPU 34. Then the data are transferred to a buffer memory 36, successively stored and finally stored in the memory 35 of a memory means 58. A reproducing motion control means 59 arranged in the CPU 34 of a control part 33 time-sequentially calls data such as the operation contents and the operation time of the remote control operation device 39 and the movement position of the massage driving part 11 and reproduces them. Thus, the last-time massage motion is easily called.



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## CLAIMS

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### [Claim(s)]

[Claim 1] In the message machine which was made to carry out message actuation of the message member according to actuation of a control unit (39) A memory means (57) to record automatically the contents of actuation which operated the control unit (39), and actuation time of day one by one is established. The message machine characterized by establishing the playback actuation control means (59) which makes a message member carry out sequential playback actuation of the message actuation according to the contents of actuation and actuation time of day which were recorded on the memory means (57).

[Claim 2] Sequential record of the contents of actuation and actuation time of day which were reproduced at the time of said playback actuation is carried out again at a memory means (57). When there is interruption actuation of a control unit (39) at the time of playback actuation, while carrying out message actuation to a message member based on interruption actuation of a control unit (39) The message machine according to claim 1 characterized by carrying out sequential record of the contents of actuation and actuation time of day of interruption actuation of a control unit (39) for a memory means (58) succeeding at the record at the time of said playback actuation.

[Claim 3] The time series of actuation time of day is followed in the contents of actuation and actuation time of day which said playback actuation control means (59) recorded on the memory means (58). A sequential call, A message member is made to carry out sequential playback actuation of the message actuation according to the contents of actuation and actuation time of day which were called. The message machine according to claim 1 or 2 characterized by consisting of immediately after interruption actuation of a control unit (39) so that the call of the contents of record of a memory means (58) may be stopped when there is interruption actuation of a control unit (39) at the time of playback actuation.

[Claim 4] The message machine according to claim 1 to 3 characterized by establishing the filtering means (57) which carries out filtering of the contents of record of said memory means (59) so that the playback actuation for fine tuning of a message member may be lost.

[Claim 5] The message mechanical component (11) which has a message member, and the migration mechanical component (9) to which a message mechanical component

(11) is moved are prepared, and a massage mechanical component (11) and a migration mechanical component (9) are controlled according to actuation of a control unit (39). In the massage machine which was made to carry out massage actuation of the massage member while moving the massage mechanical component (11) The memory means (58) which carries out sequential record of the contents of actuation and actuation time of day when there is actuation of a control unit (39), and the migration location of a massage mechanical component (11) is established. According to the contents of actuation and actuation time of day which were recorded on the memory means (58), and the migration location of a massage mechanical component (11), a massage mechanical component (11) and a migration mechanical component (9) are controlled. The massage machine characterized by establishing the playback actuation control means (59) which reproduces massage actuation of a massage member while reproducing migration of a massage mechanical component (11).

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## DETAILED DESCRIPTION

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[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the massage machine which enabled it to reproduce the contents of the last massage actuation simply.

[0002]

[Description of the Prior Art] In the conventional massage machine which was made to carry out massage actuation of the massage member according to actuation of a control unit, when a user does alter operation, there are some which created the course of a massage.

[0003]

[Problem(s) to be Solved by the Invention] However, in the conventional case, the directions actuation which creates the course of massage actuation is required for beforehand, there is a problem that the operating procedure of course creation is complicated and that it is unclear, and it was hard to use the conventional massage machine which can reproduce massage actuation. This invention records the contents of the last massage actuation simply, and enables it to reproduce the last massage actuation easily in view of the above-mentioned trouble.

[0004]

[Means for Solving the Problem] The technical means of this invention for solving the above-mentioned trouble In the massage machine which was made to carry out

message actuation of the message member according to actuation of a control unit 39. It is in the point that a memory means 57 to record automatically the contents of actuation which operated the control unit 39, and actuation time of day one by one is established, and the playback actuation control means 59 which makes a message member carry out sequential playback actuation of the message actuation according to the contents of actuation and actuation time of day which were recorded on the memory means 57 is established.

[0005] Other technical means of this invention the contents of actuation and actuation time of day which were reproduced at the time of said playback actuation. When sequential record is carried out and the memory means 57 has interruption actuation of a control unit 39 again at the time of playback actuation, while carrying out message actuation to a message member based on interruption actuation of a control unit 39. It is in the point which was made to carry out sequential record of the contents of actuation and actuation time of day of interruption actuation of a control unit 39 for the memory means 58 at the record at the time of said playback actuation succeeding. Other technical means of this invention follow the time series of actuation time of day in the contents of actuation and actuation time of day which said playback actuation control means 59 recorded on the memory means 58. A sequential call, A message member is made to carry out sequential playback actuation of the message actuation according to the contents of actuation and actuation time of day which were called. When there is interruption actuation of a control unit 39 at the time of playback actuation, it is in the point which consists of immediately after interruption actuation of a control unit 39 so that the call of the contents of record of the memory means 58 may be stopped.

[0006] Other technical means of this invention are in the point that the filtering means 57 which carries out filtering of the contents of record of said memory means 59 so that the playback actuation for fine tuning of a message member may be lost is established. The message mechanical component 11 in which other technical means of this invention have a message member, The migration mechanical component 9 to which the message mechanical component 11 is moved is formed, and the message mechanical component 11 and the migration mechanical component 9 are controlled according to actuation of a control unit 39. In the message machine which was made to carry out message actuation of the message member while moving the message mechanical component 11. The memory means 58 which carries out sequential record of the contents of actuation and actuation time of day when there is actuation of a control unit 39, and the migration location of the message mechanical component 11

is established. According to the contents of actuation and actuation time of day which were recorded on the memory means 58, and the migration location of the massage mechanical component 11, the massage mechanical component 11 and the migration mechanical component 9 are controlled. While reproducing migration of the massage mechanical component 11, it is in the point that the playback actuation control means 59 which reproduces massage actuation of a massage member is established.

[0007]

[Embodiment of the Invention] Hereafter, the gestalt of operation of this invention is explained based on a drawing. In drawing 1, the massage machine 1 is a chair mold massage machine equipped with the body 7 of equipment of the chair mold which the back also hangs down and has the section 3 and the seat 5. In said back board section 3, it has the massage mechanical component 11 prepared in the vertical direction by the migration mechanical component 9 movable. Said migration mechanical component 9 has the longitudinal-feed \*\*\*\* shaft 13 established along the vertical direction of the back board section 3, and the motor unit 14 which consists of a motor with a reducer which makes possible forward and inverse rotation of this longitudinal-feed \*\*\*\* shaft 13 at the circumference of that axial center. The longitudinal-feed \*\*\*\* shaft 13 is screwed in the shape of vertical penetration to the nut section 15 prepared in the posterior part of the massage mechanical component 11.

[0008] By this migration mechanical component 9, vertical migration (straight-line migration) of the massage mechanical component 11 can be carried out to a neck [ of a user ] or waist side within the back board section 3, and it can stop in the location of arbitration. the massage-under upper massage member [ of a right-and-left pair ] 23 and Uichi Hidari pair member 25 -- having -- these top massage member 23 and the bottom massage member 25 -- rubbing -- actuation -- striking -- three kinds of actuation and vibes actuation -- carry out massage actuation -- it is constituted by obtaining. [ mechanical component / 11 / said / massage ] Moreover, it has come to be able to perform rolling actuation which makes the massage mechanical component 11 reciprocate along with a user's body in the condition of having made the upper massage member 23 or the bottom massage member 24 advancing to a user side.

[0009] Moreover, while the upper limit limit switch 29 is formed in the upper limit location as for which said massage mechanical component 11 carries out vertical migration, the minimum limit switch 30 is formed in a minimum location, and the migration position transducer 31 which detects the migration location of the vertical direction of the massage mechanical component 11 with an engine speed, a reed



switch, etc. of the migration mechanical component 9 is formed (refer to drawing 2 ). Drawing 2 shows the control-block Fig. of the massage machine 1. 33 is a control section, it has CPU34, memory 35, a buffer memory 36, and criteria timer 37 grade, and a control section 33 inputs a detecting signal from the upper limit limit switch 29, the minimum limit switch 30, and migration position-transducer 31 grade, and it is constituted so that the massage mechanical component 11 and migration mechanical-component 9 grade may be controlled. The criteria timer 37 has the function to restrict massage actuation to predetermined time, and it is constituted so that the deadline of may be passed by predetermined time (for example, 15 minutes) from initiation of massage actuation.

[0010] it is shown in drawing 3 -- as -- the remote control operating set 39 -- the back roller switch 41 and the partial roller switch 42 -- rubbing -- a switch 43 -- it strikes and the switch 44, the width control switch 45, and the rate accommodation switch 46 are formed. Moreover, the upper accommodation switch 49, the preparations knot switch 50, the course selecting switch 51, the vibrator switch 52, the safety switch 53, and the playback switch 55 are formed in the remote control operating set 39. Said control section 33 receives the actuation signal from the remote control operating set (control unit) 39, controls the massage mechanical component 11 and the migration mechanical component 9 by the receive section 38 according to actuation of the remote control operating set (control section) 39, and it is constituted so that massage actuation may be carried out to the upper massage member 23 and the bottom massage member 25.

[0011] That is, if press (ON) actuation of the back roller switch 41 is carried out, after making the upper massage member 23 advance to a user side, the massage mechanical component 11 will be made to repeat vertical migration between an upper limit location and a minimum location, and, thereby, rolling actuation will be carried out to a user's back by the upper massage member 23. If ON actuation of the partial roller switch 42 is carried out, after making the upper massage member 23 advance to a user side, the massage mechanical component 11 will be made to repeat vertical migration in the range narrower than spacing of an upper limit location and a minimum location, and, thereby, rolling actuation will be partially carried out to a user's back by the upper massage member 23.

[0012] Moreover, when it rubs and ON actuation of the switch 43 is carried out, it rubs to the upper massage member 23 and the bottom massage member 25, and actuation is made to repeat. When it strikes and ON actuation of the switch 44 is carried out, it strikes to the upper massage member 23 and the bottom massage member 25, and

actuation is made to repeat. if ON actuation of the width control switch 45 is carried out -- spacing of the right and left of the upper massage member 23 of a right-and-left pair, and the massage-under Uichi Hidari pair member 25 to the ON actuation of every -- a large medium -- narrow -- it is alike and a sequential change is made -- making -- said roller actuation -- and it strikes and width-of-face adjustment of a sake of operation is performed. if ON actuation of the rate accommodation switch 46 is carried out -- the ON actuation of every -- the upper massage member 23 and the bottom massage member 25 -- rubbing -- actuation -- and -- striking -- a rate of operation -- a late medium -- quick -- it is alike and a sequential change is made.

[0013] If ON actuation of the upper accommodation switch 49 is carried out, between press (ON) actuation, the migration mechanical component 9 will be driven and upper part migration of the massage mechanical component 11 will be carried out. If ON actuation of the preparations knot switch 50 is carried out, between press (ON) actuation, the migration mechanical component 9 will be driven and lower part migration of the massage mechanical component 11 will be carried out. If ON actuation carries out in the course selecting switch 51, according to the program stored in massage actuation of a neck and a shoulder, massage actuation of the whole body, and massage actuation of the waist at a sequential change rate and memory 35, the massage mechanical component 11 and the migration mechanical component 9 control for every press actuation of the course selecting switch 51, and massage actuation of a neck and a shoulder, massage actuation of the whole body, and massage actuation of the waist will carry out to the upper massage member 23 and a bottom massage member 25.

[0014] if ON actuation is carried out in the vibrator switch 52 -- from the condition of an oscillating halt of a sequential change rate, the upper massage member 23, and the bottom massage member 25 to a vibration weak from the condition of an oscillating halt to the ON actuation of every, and a strong vibration -- weak -- vibration -- or it is made to vibrate strongly and vibes actuation of a user's back is carried out by the upper massage member 23 and the bottom massage member 25. Moreover, the control section 33 is constituted so that the massage mechanical component 11 and the migration mechanical component 9 may be controlled as follows. That is, the massage mechanical component 11 is moved to an upper limit location as initial actuation at the time of an electric power switch injection. Moreover, by deadline of the criteria timer 37, or ON actuation of a safety switch 53, as termination actuation of a massage, while stopping massage actuation of the upper massage member 23 and

the bottom massage member 25, the massage mechanical component 11 is moved to an upper limit location. the back roller switch 41 and the partial roller switch 42 -- rubbing -- a switch 43 -- the criteria timer 37 is operated at the same time it strikes and makes massage actuation start like the above by ON actuation of the beginning after an electric power switch injection of a switch 44, the vibrator switch 52, and one actuation switch of the course selecting-switch 51 grades.

[0015] Moreover, if ON actuation of the actuation switches other than playback switch 55 which contains a safety switch 53 after an electric power switch injection is carried out, the contents of actuation and actuation time of day when there is actuation of the remote control operating set 39 for the ON actuation of every, and the migration location of the massage mechanical component 11 will be temporarily stored to the register of CPU34. That is, the class of actuation switch of the remote-control operating set 39 which carried out ON actuation etc. is recorded as contents of actuation of the remote-control operating set 39, and the time interval of the time (at the time of starting massage actuation) of operating the remote control operating set 39 first to the time of operating the remote-control operating set 39 is recorded as actuation time of day of the remote-control operating set 39 after the time of day which the criteria timer 37 shows, i.e., an electric power switch injection. For example, in actuation of the remote control operating set 39 of the beginning behind powering on, 0 second is recorded. Moreover, the location of the vertical direction of the massage mechanical component 11 on the basis of an upper limit location with the upper limit limit switch 29 is recorded as a migration location of the massage mechanical component 11. for example, in actuation of the remote control operating set 39 of the beginning after an electric power switch injection, since it usually comes out that the massage mechanical component 11 is in an upper limit location and there is, zero location is recorded.

[0016] The data of the contents of actuation and actuation time of day which were temporarily memorized by the register of CPU34, and the migration location of the massage mechanical component 11 It is transmitted to a buffer memory 36 after that. In a buffer memory 36 \*\* to which actuation of the remote control operating set 39 transmitted from the register of CPU34 is performed, While carrying out specified quantity (for example, ten data) record of the data in which the contents of actuation of the remote control operating set 39, the actuation time of day of the remote control operating set 39, and the migration location of the massage mechanical component 11 are shown one by one Filtering of the data recorded in the buffer memory 36 is carried out with the filter means 57. And data send the data which

carried out filter processing after specified quantity \*\*\*\*\* at memory 35, and, finally record the data of the contents of actuation and actuation time of day for every actuation of the remote control operating set 39, and the migration location of the massage mechanical component 11 on memory 35 at a buffer memory 36.

[0017] Therefore, the memory means 58 which carries out sequential record of the contents of actuation of the remote control operating set 39 when there is actuation of the remote control operating set 39, the actuation time of day of a control unit, and the migration location of the massage mechanical component 11 by the register, the buffer memory 36, and memory 35 of CPU34 is constituted. Filter processing within the buffer memory 36 by said filter means 57 is processing for processing the contents of record of said memory means 57 so that the playback actuation for fine tuning of a massage member may be lost, deleting an unnecessary part from the record transmitted in accordance with time series in the buffer memory 36, and transmitting record of the arranged form to memory (normal) 35, and the \*\* operating time cuts the massage actuation not more than 0.5 second. \*\* After the input of an actuation switch, when the time amount to the next actuation is 0.5 or less seconds, omit the contents of actuation. \*\* When spacing of adjustment actuation of the centering control of the vertical location of the massage mechanical component 11 is 3 or less seconds, count backward the time amount to have gone too far, and process rewriting record etc. so that the time amount equivalent to movement magnitude may be advanced.

[0018] Moreover, the playback actuation control means 59 is formed in CPU34 of a control section 33. When this playback actuation control means 59 has ON actuation of the playback switch 55, The time series of actuation time of day is followed in the data of the contents of actuation of the remote control operating set 39 and actuation time of day which were recorded on the memory means, and the migration location of the massage mechanical component 11. A sequential call, While controlling the massage mechanical component 11 and the migration mechanical component 9 and reproducing migration of the massage mechanical component 11 according to the called migration location of the contents of actuation of the remote control operating set 39, actuation time of day, and the massage mechanical component 11 Massage actuation of the upper massage member 23 and the bottom massage member 25 is reproduced. Moreover, when there is interruption actuation of the remote control operating set 39 at the time of playback actuation, the playback actuation control means 59 consists of immediately after interruption actuation of the remote control operating set 39 so that the call of the contents of record of a memory means may be

stopped.

[0019] Moreover, the control section 33 is constituted so that sequential record of the data of the contents of actuation and actuation time of day which were reproduced at the time of said playback actuation, and the migration location of the massage mechanical component 11 may be carried out again at a memory means. Moreover, when the interruption actuation of the remote-control operating set 39 is at the time of playback actuation, while a control section 33 carries out massage actuation to the upper massage member 23 and a bottom massage member 25 based on the interruption actuation of the remote-control operating set 39, a memory means constitutes succeeding the contents of actuation of interruption actuation of the remote-control operating set 39, actuation time of day, and the migration location of a massage mechanical component 11 at the record at the time of said playback actuation so that sequential record may carry out.

[0020] Next, the massage actuation by actuation of the remote control operating set 39 is explained, referring to the flow chart of drawing 4. the step 1 after switching on an electric power switch -- the back roller switch 41 of the remote-control operating set 39, and a partial roller switch 42 -- it rubs, a switch 43 and a time check according [ if it strikes and there is ON actuation of one actuation switch of a switch 44, the vibrator switch 52, and the course selecting switch 51, the criteria timer 37 will start actuation at step 2, and ] to the criteria timer 37 at step 3 are performed, and it progresses to step 4 and step 6.

[0021] Therefore, if ON actuation of the first actuation switch is after the injection of an electric power switch, the criteria timer 37 will start actuation and the time check by the criteria timer 37 will be performed. If it distinguishes whether ON actuation of the safety switch 53 was carried out and there is ON actuation of a safety switch 53 at step 4, it will progress to step 8 and termination actuation of a massage will be performed. If it distinguishes that there was no ON actuation of a safety switch 53 at step 4, massage actuation according to actuation of the remote control operating set 39 will be performed at step 5. Therefore, according to the actuation switch by which ON actuation was carried out, the massage mechanical component 11 and the migration mechanical component 9 are controlled by ON actuation of the actuation switch of the beginning after an electric power switch injection, and the massage actuation by the upper massage member 23 and the bottom massage member 25 is started.

[0022] On the other hand, the contents of actuation and actuation time of day when there is actuation of the remote control operating set 39, and the migration location of

the message mechanical component 11 are temporarily stored in the register of CPU34 at step 6. At step 11 The data of the contents of actuation and actuation time of day which were stored in the register of CPU34, and the migration location of the message mechanical component 11 are transmitted to a buffer memory 36. At step 12 While recording the data of the contents of actuation of the remote control operating set 39 and actuation time of day which were transmitted from the register of CPU34, and the migration location of the message mechanical component 11, filtering of the data recorded in the buffer memory 36 is carried out with the filter means 57. And finally the data of the contents of actuation and actuation time of day by which filter processing was carried out, and the migration location of the message mechanical component 11 are recorded and saved in memory 35 at step 13.

[0023] Moreover, it progresses to step 7 from step 5, and distinguishes whether it is deadline at step 7. If it is deadline, termination actuation of a message will be performed at step 8. If the deadline of is not passed, it progresses to step 9. If it distinguishes whether there was any ON actuation of one containing a safety switch 53 of actuation switches and there is ON actuation of an actuation switch at step 9, it progresses to step 3, and the time check by the criteria timer 37 will be performed at step 3, and it will progress to step 4 and step 6 from step 3 like the above. At step 9, if there is no ON actuation of an actuation switch, after step 10 performs the time check by the criteria timer 37, it will progress to step 7.

[0024] Therefore, whenever there is ON actuation of an actuation switch, while the time check by the criteria timer 37 is performed, it changes to the message actuation according to the actuation switch by which ON actuation was carried out, and sequential record of the data of the contents of actuation and actuation time of day when filter processing was made, and the migration location of the message mechanical component 11 is carried out at memory 35 according to the time series of actuation time of day. Moreover, message actuation according to ON actuation of the last actuation switch is continued considering deadline as a limit after there is ON actuation of an actuation switch until there is ON actuation of a next actuation switch.

[0025] Next, it explains, referring to the flow chart which shows playback actuation of a message to drawing 5 . If ON actuation of the playback switch 55 is carried out at step 31, the criteria timer 37 will start actuation at step 32. step 33 -- the record in memory 35 -- one every actuation of the remote control operating set 39 -- calling . At step 34, the time check by the criteria timer 37 is performed, and if the deadline of whether the deadline of was passed at step 36 when it distinguished whether there was any interruption actuation of the remote control operating set 39 at step 35 and

there was no interruption actuation is distinguished and passed, termination actuation of a message will be performed at step 41. If the deadline of is not passed, it progresses to step 37. step 37 -- the call appearance from the time of day and the memory 35 of the criteria timer 37 -- if it distinguishes whether actuation time of day is in agreement the bottom and it is not in agreement -- step 34 -- return -- if in agreement -- step 38 -- progressing -- step 38 -- call appearance -- it distinguishes whether it is what shows that ON actuation of a safety switch 53 had data of the contents of record the bottom, and if record is ON actuation of a safety switch 53, termination actuation of a message at step 41 will perform. If the data of the contents of actuation are not ON actuation of a safety switch 53 at step 38 and it will distinguish, it will progress to step 39 and step 40, and message actuation will be performed at step 39.

[0026] When there is ON actuation of the playback switch 55, the time series of actuation time of day is followed in the data of the contents of actuation of the remote control operating set 39 and actuation time of day which were recorded on the memory means 58, and the migration location of the message mechanical component 11. Therefore, a sequential call, According to the called migration location of the contents of actuation of the remote control operating set 39, actuation time of day, and the message mechanical component 11, the message mechanical component 11 and the migration mechanical component 9 are controlled. While reproducing migration of the message mechanical component 11, message actuation of the upper message member 23 and the bottom message member 25 is reproduced.

[0027] The contents of actuation and actuation time of day for one actuation which were reproduced, and the migration location of the message mechanical component 11 are temporarily stored in the register of CPU34 at step 40. Moreover, at step 11 of drawing 4 The data of the contents of actuation and actuation time of day which were stored in the register of CPU34, and the migration location of the message mechanical component 11 are transmitted to a buffer memory 36. At step 12 While recording the data in which the contents of actuation of the remote control operating set 39 and the actuation time of day of the remote control operating set 39 which were transmitted from the register of CPU34, and the migration location of the message mechanical component 11 are shown Filtering of the data recorded in the buffer memory 36 is carried out with the filter means 57. And finally the data of the contents of actuation and actuation time of day by which filter processing was carried out, and the migration location of the message mechanical component 11 are recorded and saved in memory 35 at step 13.

[0028] Therefore, sequential record of the data of the contents of actuation and actuation time of day which were reproduced at the time of playback actuation, and the migration location of the massage mechanical component 11 is carried out again at a memory means. The following contents of record are called to step 33 at return and step 33 from step 39, and playback actuation with massage actuation of migration of the massage mechanical component 11, the upper massage member 23, and the bottom massage member 25 is repeated like the following. Moreover, sequential record of the data of the contents of actuation and actuation time of day which were reproduced, and the migration location of the massage mechanical component 11 is carried out again at memory 35.

[0029] If it distinguishes that there was interruption actuation at step 35, while ending playback actuation, progressing from step 9 of the flow chart of drawing 4 to step 3 and step 4, becoming to the massage actuation by actuation of the aforementioned remote control operating set 39 and, moving the massage mechanical component 11 on the other hand based on interruption actuation of the remote control operating set 39, massage actuation is carried out to the upper massage member 23 and the bottom massage member 25. Moreover, succeedingly, after the data of the contents of actuation of interruption actuation of the remote control operating set 39, actuation time of day, and the migration location of the massage mechanical component 11 carry out filter processing within a buffer memory 36 to the record at the time of said playback actuation, sequential record of them is carried out in memory 35 through the register of CPU34, and a buffer memory 36 at it.

[0030] Therefore, according to the gestalt of the above-mentioned implementation, by the function which records the contents which operated the remote control operating set 39 last time, and is reproduced, a user's favorite massage actuation course can be created easily, and it can reproduce. Moreover, by making the massage actuation which the user is feeling, and its contents of actuation record serially, prior program alter operation like before can be excluded, and an original course can be made easily. Moreover, the useless part of actuation, such as fine tuning of massage actuation, can be excluded from the contents recorded last time by filter processing (software processing), and it can correct to the contents of effective massage actuation automatically.

[0031] Moreover, when the user of the massage machine 1 repeats and operates the remote control operating set 39, correction of the contents of record to memory 35 is repeated serially, and the course of the massage actuation more near hope is automatically obtained for a user. furthermore, the standard course (for example, a



neck course, a whole body course, a waist course) of the massage machine 1 -- being working -- even when -- the contents -- the same procedure -- record and correction -- it can reproduce and custom-made \*\* of a standard course is made. In addition, a series of operations sequence (pattern) of massage actuation Only one pattern is recorded in the memory 35 in a control section 33, may make it overwrite this by the newest pattern which carried out alter operation, and Moreover, what is necessary is to choose the call of two or more patterns, and a pattern, and just to make it obtain, in making it make memory 35 memorize two or more patterns and making memory 35 memorize two or more patterns. Moreover, when it is made to overwrite the pattern recorded on memory 35 by the newest pattern, a protection feature is prepared in memory 35 and you may enable it to prevent overwrite of a pattern by the change of a switch etc. Moreover, it is desirable to use the storage element of the type with which record remains even if it turns off the power for the memory 35 for pattern storage.

[0032] Moreover, the time of there being actuation of the remote control operating set 39 according to the gestalt of said operation, The migration location of the massage mechanical component 11 other than the contents of actuation and actuation time of day is recorded on a memory means. Although he is trying to reproduce massage actuation of a massage member while controlling the massage mechanical component 11 and the migration mechanical component 9 and reproducing migration of the massage mechanical component 11 according to the contents of actuation and actuation time of day which were recorded on this memory means, and the migration location of the massage mechanical component 11 Replace with this and record of the migration location of the massage mechanical component 11 to the memory means 58 is omitted. It may be made to carry out sequential record of the contents of actuation and actuation time of day when there is actuation of the remote control operating set 39 at the memory means 58. Even if such, while controlling the massage mechanical component 11 and the migration mechanical component 9 and reproducing migration of the massage mechanical component 11 according to the contents of actuation and actuation time of day which were recorded on the memory means 58, it is possible to reproduce massage actuation of a massage member.

[0033] Moreover, the massage mechanical component 11 which has a massage member in the massage machine of the gestalt of said operation, Although it is made to carry out massage actuation of the massage member while the migration mechanical component 9 to which the massage mechanical component 11 is moved is formed, controlling the massage mechanical component 11 and the migration

mechanical component 9 according to actuation of the remote control operating set 39 and moving the massage mechanical component 11 The massage machine with which the invention in this application is applied can carry out application implementation of this invention also at the fixed massage machine which the massage mechanical component 11 which is not limited to such a thing, for example, has a massage member does not move. In addition, it is natural that it becomes unnecessary to record the migration location of the massage mechanical component 11 on the memory means 58 in this case.

[0034] Moreover, although the remote control operating set 39 is formed as a control unit and it is made to carry out massage actuation of the massage member with the gestalt of said operation according to switch actuation of the remote control operating set 39 Replace with this and the arm-rest section of the massage machine 1 etc. is equipped with the control panel as a control unit. May be made to carry out massage actuation of the massage member by actuation of this control panel, and It may be made to carry out massage actuation of the massage member by preparing both the remote control operating set 39 and a control panel as a control unit, and operating alternatively the remote control operating set 39 or a control panel.

[0035] Moreover, the filtering means 57 which carries out filtering of the contents of record of said memory means 59 with the gestalt of said operation so that the playback actuation for fine tuning of a massage member may be lost Although it prepares in a buffer memory 36 and is made to carry out filtering of the contents of record by the buffer memory 36 Before replacing with this, and being made to carry out filter processing of the contents of record within memory 35 and transmitting record data to a buffer memory 36, it may be made to carry out filtering of the record data.

[0036] Moreover, with the gestalt of said operation, when there is actuation of the first control unit after the injection of an electric power switch Although the time interval of the time of operating a control unit from this time by operating the criteria timer 37 on the basis of the time of there being actuation of the first control unit after the injection of an electric power switch is made into the actuation time of day of a control unit The time interval of \*\* which the actuation time of day of a control unit is not limited to this, for example, operates a control unit It is also possible to consider as the actuation time of day of a control unit, and it is good also considering the time interval of the time of operating the criteria timer 37 from a power up, and operating a control unit from the injection time of an electric power switch on the basis of the injection time of an electric power switch as actuation time of day of a control unit.

[0037] Moreover, although the upper massage member 23 of a right-and-left pair and the massage-under Uichi Hidari pair member 25 are formed as a massage member, a massage member is not limited to such a thing, for example, you may make it form either the upper massage member 23 or the bottom massage member 25 as a massage member, and may make it constitute a massage member from a gestalt of said operation by the air cell of a bellows type etc.

[0038]

[Effect of the Invention] According to this invention, the contents of the last massage actuation can be recorded easily and the last massage actuation can be reproduced easily.

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## DESCRIPTION OF DRAWINGS

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[Brief Description of the Drawings]

[Drawing 1] It is the perspective view of the massage machine in which the gestalt of 1 operation of this invention is shown.

[Drawing 2] It is the block diagram of this control system.

[Drawing 3] It is the front view of this remote control operating set 39.

[Drawing 4] It is the flow chart which shows the massage actuation by actuation of a control unit.

[Drawing 5] It is the flow chart which shows the massage actuation by reappearance actuation.

[Description of Notations]

1 Massage Machine

9 Migration Mechanical Component

11 Massage Mechanical Component

23 Upper Massage Member

24 Bottom Massage Member

39 Remote Control Operating Set (Control Unit)

57 Filter Means

58 Memory Means

59 Playback Actuation Control Mean

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